

City of Chattanooga, TN
Personnel Class Specification

Class code 0611

FLSA: Non-Exempt

**CLASSIFICATION TITLE: ELECTRICAL/INSTRUMENT
TECHNICIAN**

PURPOSE OF CLASSIFICATION

The purpose of this classification is to perform skilled work functions associated with installing, repairing, and maintaining electrical instrumentation and equipment.

ESSENTIAL FUNCTIONS

The following duties are normal for this position. These are not to be construed as exclusive or all-inclusive. Other duties may be required and assigned.

Performs electrical repair/maintenance on instrumentation and electrical equipment needed to maintain the operation of Interceptor Sewer System, including treatment plant, pumping stations, sewage grinder stations, storm water flood control stations, centrifuge building, oxygen plant and cooling tower.

Designs, builds, installs, troubleshoots, repairs, calibrates and cleans a wide variety of instrumentation and electrical equipment, which may include AC/DC motor starters and controls, variable speed drives, high/low voltage switchgear, circuit breakers, transformers, power supplies, interior/exterior lighting, sump pumps, bubble lines, filter presses, timers and timing relays, flow meters and controllers, chart recorder and indicators, lower explosive limit gas sensors, dissolved oxygen meters, suspended solids meters, pH meters, ampere meters, voltage meters, RPM meters, and current transformers.

Performs various repair/maintenance tasks, which may include troubleshooting equipment malfunctions, troubleshooting electrical problems, replacing parts, maintaining substation, welding/fabricating metal parts and components, bending/shaping conduit, pulling conduit wiring, splicing electrical connections, drilling/punching holes, and lifting/moving heavy materials.

Operates a variety of machinery, equipment, and tools associated with department projects, which may include a utility vehicle, conduit benders, knock-out punches, crimping tools, high voltage stick/gloves, band saw, drill press, sand blaster, pipe threading equipment, welder, torch, gauges, pipe threading equipment, electrician tools, mechanic tools, calibration equipment, and diagnostic instruments.

Inspects/tests machinery, equipment and parts for proper operations; makes adjustments, repairs or replacements as appropriate; reports problem situations.

Performs general cleaning/maintenance tasks necessary to keep vehicles, equipment, and tools in operable condition, which may include inspecting equipment, checking fluid levels, replacing fluids, greasing equipment, replacing parts, washing/cleaning equipment, and cleaning shop/work areas; monitors equipment operations to maintain efficiency and safety; reports faulty equipment.

Utilizes precautionary safety equipment and monitors work environment to ensure safety of employees and other individuals.

Monitors inventory levels of parts, equipment, tools, or supplies; initiates requests for new or replacement materials.

Prepares or completes various forms, correspondence, reports, work orders, requisitions, diagrams, measurement statements, and other documents.

Receives various forms, reports, work orders, invoices, graphs, maps, blueprints, diagrams, specifications, catalogs, manuals, or other documentation; reviews, processes, forwards or retains as appropriate.

Operates a computer to enter, retrieve, review or modify data; verifies accuracy of entered data and makes corrections as appropriate; utilizes electrical troubleshooting or other software programs.

Communicates with supervisor, employees, other departments, vendors/suppliers, the public, and other individuals as needed to coordinate work activities, review status of work, exchange information, or resolve problems.

Communicates via telephone and/or two-way radio; provides information and assistance; takes and relays messages or directs calls to appropriate personnel; returns calls as necessary.

ADDITIONAL FUNCTIONS

Provides assistance to other employees or departments as needed.

Performs other related duties as required.

MINIMUM QUALIFICATIONS

Associate's degree in Electronics, Instrumentation, or closely related field; supplemented by three (3) to six (6) years previous experience and/or training that includes electrical/electronic maintenance; or any equivalent combination of education, training, and experience which provides the requisite knowledge, skills, and abilities for this job. Must possess and maintain valid Plant Electrician License. Must possess and maintain a valid Tennessee Driver's License.

PERFORMANCE APTITUDES

Data Utilization: Requires the ability to review, classify, categorize, prioritize, and/or analyze data. Includes exercising discretion in determining data classification, and in referencing such analysis to established standards for the purpose of recognizing actual or probable interactive effects and relationships.

Human Interaction: Requires the ability to exchange information for the purpose of clarifying details within well established policies, procedures and standards.

Equipment, Machinery, Tools, and Materials Utilization: Requires the ability to overhaul, restore, renovate, construct, and/or rebuild equipment, machinery, or objects, requiring adherence to prescribed standards and specifications. Requires the ability to operate and control the actions of the same equipment, machinery, and/or objects.

Verbal Aptitude: Requires the ability to utilize a wide variety of reference, descriptive, and/or advisory data and information.

Mathematical Aptitude: Requires the ability to perform addition, subtraction, multiplication and division; ability to calculate decimals and percentages; may include ability to perform mathematical operations with fractions; may include ability to compute discount, interest, profit and loss, ratio and proportion; may include ability to calculate surface areas, volumes, weights, and measures.

Functional Reasoning: Requires the ability to apply principles of rational systems; to interpret instructions furnished in written, oral, diagrammatic, or schedule form; and to exercise independent judgment to adopt or modify methods and standards to meet variations in assigned objectives.

Situational Reasoning: Requires the ability to exercise judgment, decisiveness and creativity in situations involving the evaluation of information against sensory, judgmental, or subjective criteria, as opposed to that which is clearly measurable or verifiable.

ADA COMPLIANCE

Physical Ability: Tasks require the regular and, at times, sustained performance of moderately physically demanding work, typically involving some combination of climbing and balancing, stooping, kneeling, crouching, and crawling, and that may involve the lifting, carrying, pushing, and/or pulling of moderately heavy objects and materials (20-50 pounds).

Sensory Requirements: Some tasks require the ability to perceive and discriminate colors or shades of colors, sounds, odor, depth, and visual cues or signals. Some tasks require the ability to communicate orally.

Environmental Factors: Performance of essential functions may require exposure to adverse environmental conditions, such as dirt, dust, pollen, odors, wetness, humidity, rain, fumes, temperature and noise extremes, machinery, electric currents, traffic hazards, toxic agents, violence, insect bites, disease, or pathogenic substances.

Chattanooga, Tennessee, is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the City will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer.

Revised: July 2003